

## PROCEEDINGS OF LEARNED SOCIETIES.

## GEOLOGICAL SOCIETY.

February 7th, 1900.—W. Whitaker, B.A., F.R.S.,  
President, in the Chair.

The following communication was read:—

‘Foraminifera from an Upper Cambrian Horizon in the Malverns.’  
By Frederick Chapman, Esq., A.L.S., F.R.M.S.

The foraminifera described in this paper were found in a shaly limestone which Prof. Groom obtained ‘from the débris of a small ridge composed of black shales, with intercalated basalts, which forms a spur on the north-west side of Chase End Hill. The rock belongs to the well-known and widely-spread zone of *Sphaerophthalmus*, *Peltura*, and *Ctenopyge*, which in Britain forms the upper half of the Dolgelly Beds or Upper *Lingula*-Flags.’ The specimens have been sliced, and have yielded a few forms other than *Spirillina*; sections of echinoderm-spines, ostracod-tests, and occasionally sponge-spicules (?) are also to be seen in the slides. The tests of the foraminifera are infilled with a crystalline substance.

The following species are mentioned:—*Lagena levis*, Montagu, *L. apiculata*, Reuss, *L. ovum*, Ehrenberg, *Nodosaria pygmaea* (?) Terquem, *N. abnormis* (?) Reuss, *Marginula soluta* (?) Reuss, *Cristellaria acutauricularis* (?) (Fichtel & Moll); and a new species of *Spirillina* is described. The *Spirillinae* are in a good state of preservation; and the valves of mollusca, cut through in section, are sometimes seen to be quite filled with the tests of this genus.

A record is given of some of the earliest known foraminifera, including the somewhat doubtful forms described by Cayeux from pre-Cambrian rocks in Brittany, those by Ehrenberg from the so-called ‘Silurian Clay’ near St. Petersburg, by W. D. & G. F. Matthew from the rocks bearing the *Protolenus*-fauna in New Brunswick, by Keeping from the shales above the Bala Limestone near Welshpool, by Blake from the Llandovery of Cwm Symlog, by Brady from the Woolhope Limestone of the Malverns, and by Terquem from the Upper Silurian rocks of Indiana. The Author has also frequently met with *Lagena* in the Wenlock Limestone of Shropshire.